

Appl. No. 09/930,804

Amdt. Dated: February 4, 2005

Response to Office action dated: December 14, 2004

REMARKS

No new claims have been added and no claims have been cancelled. Claims 1-4 have been amended and are pending. No new matter has been added.

Disclaimers Relating to Claim Interpretation and Prosecution History Estoppel

Claims 1-4 have been amended for cosmetic purposes and for clarity. Claims 1-4 have been amended solely for the purpose of expediting the patent application process and were neither made for patentability nor to distinguish over the cited art.

Drawings

The application was filed with informal drawings. Substitute formal drawings attached hereto in Appendix A. No new matter has been added.

Specification

The specification has been amended to clarify the disclosure. No new matter has been added.

Claim Rejections - 35 USC § 103

The Examiner rejected claims 1-4 under 35 USC § 103 as obvious in view of the combination of Bass et al.(USP 6,557,053), Lee et al. (USP 6,442,674), Sun et al (USP 6,574,194) and Manning (USP 6,708,262). This rejection is respectfully traversed.

According to MPEP § 2142, to establish a *prima facie* case of obviousness, three criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; (3) the prior art references when combined must teach or suggest all the claim limitations. Importantly, the teaching

Appl. No. 09/930,804

Amdt. Dated: February 4, 2005

Response to Office action dated: December 14, 2004

or suggestion to make the claimed combination must be found in the prior art and not be based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

Claims 1-4 are not obvious in view of the cited references for multiple reasons.

First, the cited references may not be properly combined because they are not all in the same field. "In order to rely a reference as a basis for rejection of an applicant's invention, the reference must either be in the field applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." MPEP 2141.01(a) quoting *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). Pertinent to the pending application is *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993) in which the court found that claims directed to single inline memory modules (SIMMs) for installation on a printed circuit motherboard for use in personal computers were not in the same field of endeavor as SIMMs for an industrial controller.

Regarding Bass, the primary reference, and Sun, although Bass and Sun recite inventions that involve data packets, they are nonetheless in different fields. Bass describes a three way memory system having an input and an output FIFO buffer and an external memory. (Bass, 2:13-36) Sun describes a switching system that includes a variety of queue managers and related components that arbitrate among multiple ports to ensure that packets are correctly routed. (Sun, Abstract and 1:54-2:27, 4:28-42) Sun does not involve a memory system like that described in Bass but is more complex and involves an architecture for a communication system that includes processing based on the content of packets and port arbitration. (Sun, 1:54-65, 6:2-8) The invention of Sun is at a higher level and is more involved than the invention described in Bass. For these reasons, Bass and Sun are in different fields and may not be properly combined.

Neither Lee nor Manning are involved with data packets while Bass and Sun are. Lee is directed to a "Method and system for bypassing a fill buffer located along a first instruction path."

Appl. No. 09/930,804

Amdt. Dated: February 4, 2005

Response to Office action dated: December 14, 2004

(Lee, Title) As such, Lee involves the functionality of passing microprocessor instructions (also known as micro-ops and μ ops) along an instruction path of a microprocessor. (Lee, 1:55-67, 2:19-29)

Moreover, Lee is explicitly limited to processor instructions. (Lee, 2:26-29) The instruction pipeline technology described in Lee is not analogous to and cannot be used to construct the FIFO memory that stores data packets that is recited in claim 1. Further, Sun and Bass, although distinctly different from claim 1 for other reasons, involve data packets whereas Lee involves μ ops. As such, the microprocessor instruction teachings of Lee are not in the same filed as the data packet teachings of Sun and Bass. Therefore, Lee may not properly be combined with Sun and Bass.

In addition, Manning is directed to a "Memory device command signal generator." (Manning, Title). More specifically, Manning describes a command generator for a dynamic random access memory (DRAM) that decrements a counter, the output of which is decoded to generate various command signals for the DRAM. (Manning, Abstract and 2:19-35) As such, Manning is directed to command generation for memory control, a field different from the FIFO memory that handles data packets recited in claim 1. Moreover, Bass and Sun are not in the filed of command generation for memory control described in Manning, but are directed to a memory that handles data packets and a communication system that handles data packets, respectively. Therefore, Manning may not properly be combined with Sun and Bass.

Second, the prior art references when properly combined do not teach or suggest all the claim limitations. Because Bass may not be properly combined with Sun, Lee and Manning, Bass alone must be considered. The Office Action admits that various limitations recited in claim 1 are not taught by Bass alone, and, therefore, the Office Action also includes Sun, Lee and Manning in the rejection. Therefore, because Sun, Lee and Manning may not be properly combined with each other and with Bass as set forth above, and in view of the admissions recited in the Office Action, Bass does not alone teach all of the limitations recited in claim 1. Therefore, claim 1 is not rendered obvious by Bass.

Appl. No. 09/930,804

Amdt. Dated: February 4, 2005

Response to Office action dated: December 14, 2004

In arguendo, were Bass combinable with Sun, the switching elements recited in the claim are not taught or suggested by this combination. The switches in Sun are standalone physical devices used in computer networking (Sun, 1:23-30) or the entire switch system 100 (Sun, Fig. 1 and 57-60), which are incompatible with the switching elements recited in claim 1. It is unclear whether the Office Action is referring to the switching system 100 of Sun (Sun, Fig. 1 and 57-60) or the switch systems referred to in the background section of Sun. (Sun, 1:23-30). We hereby request clarification. In any event, the switching system 100 of Sun has components that are at a higher level than Bass and provide functionality that cannot be combined with Bass and will not result in a device as recited in claim 1. It would not make sense to combine Sun with Bass because a single switch system 100 of Sun already has eight output ports, whereas the claim recites a plurality of switching elements. That is, the claim does not recite a single switching element with a plurality of ports. As such, even if Sun were combined with Bass, the resulting creation would be different from and would not teach or suggest the switching elements recited in claim 1 or the other limitations recited in claim 1.

In addition, if *in arguendo* the combination of Bass and Sun is considered, as admitted in the Office Action, the combination of Bass and Sun does not teach all of the limitations recited in claim 1. The Office Action admits that the combination of Bass and Sun "do not disclose delivering data packets at a relatively slow rate." (Office Action, p. 3, lines 9-10) The Office Action also admits that the combination of Bass, Sun and Lee "do[es] not disclose a large capacity buffer memory having an effectively lower clock rate than said FIFO memories." (Office Action, p. 3, lines 16-17) Therefore, because Lee and Manning may not be properly combined with Sun and Bass as set forth above, and in view of the admissions recited in the Office Action, even if Sun and Bass could be combined (and we do not think that Bass and Sun can be properly combined), the combination of Sun and Bass do not teach all of the limitations recited in claim 1.

Appl. No. 09/930,804

Amdt. Dated: February 4, 2005

Response to Office action dated: December 14, 2004

Third, there is no motivation to combine the references expressed in the cited art. "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." MPEP 2143.01 citing *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990) (emphasis in MPEP). As set forth above, because Bass, Sun, Lee and Manning are not in the same filed, there is likewise no motivation to combine inventions from disparate areas. (Moreover, if the entirety of the inventions described in Bass, Sun, Lee and Manning were combined, a unique invention unlike that recited in claim 1 would result.)

More specifically, the Office Action asserts that Sun provides the motivation to combine Sun with Bass because Sun states that it is desirable to have a switch with minimum latency that is low cost. (Sun, 1:43-45) However, combining Sun with Bass would eliminate the low cost as further complexity is added to the system by their combination, resulting in higher cost. As such, the stated motivation for the system in Sun also dissuades from and teaches away from the combination of Sun and Bass.

With regard to the motivation for combining Lee to create a FIFO memory at all similar to that recited in claim 1, the slow clock speed of a microprocessor pipeline cannot be a motivating factor in combining art to create such a FIFO memory. That is, the microprocessor system described in Lee cannot serve to motivate the creation of a FIFO memory like that recited in claim 1. More specifically, the Office Action combines Lee with Bass -- the motivation of achieving increased performance in a microprocessor pipeline that involves μ ops as taught in Lee cannot motivate a person skilled in the art to apply the techniques of Lee to the queue manager handling data described in Bass.

With regard to the motivation for combining Manning with Bass, although Manning described a signal generator, the portion of Manning cited in the Office Action merely states that "DRAMs often operate at far from optimum speed when then receive a relatively slow clock signal."

Appl. No. 09/930,804

Amdt. Dated: February 4, 2005

Response to Office action dated: December 14, 2004

This statement includes nothing that serves to motivate one skilled in the art to combine any teaching of Manning with Bass. We hereby request clarification of how anything in Manning motivates a person skilled in the art to combine any teaching of Manning with Bass to create a FIFO memory as recited in claim 1.

For all of the reasons set forth above, claim 1 is not rendered obvious by the cited prior art patents. By virtue of their dependency on claim 1, claims 2, 3 and 4 are likewise patentable over the cited prior art patents.

Conclusion

In view of all of the above, it is respectfully submitted that the application is in condition for allowance. Reconsideration and reexamination are respectfully requested and allowance at an early date is solicited. The Examiner is invited to call the undersigned attorney to with any questions or to discuss any steps necessary for placing the application in condition for allowance.

Respectfully submitted,



Mark A. Goldstein, Reg. No. 50,759

Date: February 4, 2005

SoCal IP Law Group
310 N. Westlake Blvd., Suite 120
Westlake Village, CA 91362
Telephone: 805/230-1350
Facsimile: 805/230-1355
email: mgoldstein@socalip.com